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| 09/885,198  | 06/20/2001  | Augustin T. Chen     | 393325              | 5726             |
| 7590  | 12/22/2005  |                      | EXAMINER            |                  |
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|   |             |                      | ART UNIT            | PAPER NUMBER     |
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/885,198  
Filing Date: June 20, 2001  
Appellant(s): CHEN ET AL.

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Janelle D. Strode  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**  
DEC 22 2005  
**GROUP 1700**

This is in response to the appeal brief filed September 26, 2005 appealing from the Office action mailed April 26, 2005.

**(1) *Real Party in Interest***

A statement identifying the real party of interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal. The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) *Status of Claims***

The statement of the status of claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Claimed Subject Matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds of Rejection to be Reviewed on Appeal***

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

***(7) Claims Appendix***

The copy of the appealed claims contained in the Appendix to the brief is correct.

***(8) Evidence Relied Upon***

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

***(9) Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 22, 24, 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 U.S.C 103(a) as obvious over Morris et al. (US 5,514,122).

Prior art to Morris et al. discloses pressure-sensitive adhesive compositions comprising a matrix or binder and polymeric microspheres. The microspheres are based on polymerizable monomers selected from group of alkyl acrylate esters, alkyl methacrylate esters etc. (column 4, lines 10-11). The matrix or binder is based on free radically polymerizable acrylate such as isooctyl acrylate, isononyl acrylate, n-butyl acrylate, hexyl acrylate etc. (column 6, lines 42-53). The disclosure further includes that for obtaining superior cohesive strengths, the adhesive matrix may be crosslinked with multiacrylates (column 7, lines 46-51). The adhesive may comprise 1 to 60 parts of water dispersible acrylate microspheres and 99 to 40 parts of aqueous latex as adhesive matrix (column 15, lines 39-58, claim 1). Additionally, in working examples 1-7 in column 10 for adhesive preparation, an aqueous microsphere suspension of 25% solids by weight or 40% solids by weight is blended with latex adhesive in amounts appropriate to provide the desired wt.% of microspheres on a dry basis. In this prior art, the weight ratio, on a solids

Art Unit: 1713

basis, of microspheres to crosslinked acrylate polymer ranges from 0.04:1 to 2:1 (column 11, Table 1). Morris et al. disclose a disposable absorbent article which comprises a liquid permeable layer, an absorbent layer, and a liquid impermeable backing layer and a linerless adhesive fastening region on at least one face of said backing layer comprising the adhesive composition. The adhesive compositions comprising microspheres may be coated on a backing material which may be wound into a roll or tape (column 1, lines 64-67). The present invention recites composition and article comprising microspheres made by a specific process but the final product made by the process reads on the prior art composition. Where product by process claims are rejected over prior art product, the burden is shifted to applicants to establish unobvious difference, even the production processes are different. *In re Thorpe*, 227 USPQ 964 (FED. Cir. 1985).

***(10) Response to Argument***

Appellants assert that the microspheres discussed in Morris et al. (column 4, lines 58-65) differ from instant invention as claimed, that the solid microspheres are not produced by one-step emulsification process and that the composition of the microspheres is not the same as defined in Claim 22. At the outset, it is noted Morris et al. do not restrict their invention on adhesive compositions to those comprising hollow microspheres but also extend the invention to adhesive compositions comprising solid microspheres (column 4, lines 58-65 and in column 6, lines 7-11). The adhesive compositions of Morris et al. comprise (a) aqueous suspensions of hollow or solid microspheres and (b) aqueous crosslinked acrylic latex, both within the instantly claimed range as described above the Grounds of Rejection. It is noted that component (c) is

Art Unit: 1713

optional in instant claims 22 and 27. The instant claims 22 and 27 additionally recite process limitations to make solid microspheres. These product by process claims are rejectable over prior art products because Appellants have not demonstrated the criticality of the process recited in instant claims to prepare solid microspheres or provide data to show how the solid microspheres of the instant invention differ from the prior art solid microspheres.

Morris et al. disclose that solid microspheres may be prepared by one-step emulsification process as described in U.S. Pat. No.s 3,620,988; 4,166,152; 44,495,318; 4,598,112; 4,786,696 or 4,645,783 and DE 3,544,882. Although, such a one-step process to make solid microspheres differs from the instantly recited two-step process in claims 22 and 27, Appellants' have not illustrated how the 2-step process affords a different product from the prior art processes. The 2-step process of the instant invention includes polymerization of acrylic monomers in the presence of non-free radically polymerizable acid component. Such an acid component is not copolymerizable with other monomers and thus, does not in any way alter the composition of the microspheres.

With regard to Appellants' assertion that the composition of the microspheres in Morris et al. is not same, it is noted that the microspheres in Morris et al. may include monomers based on acrylates and methacrylates (column 2, lines 35-48) as well as polar monomers such as acrylic acid, methacrylic acid, itaconic acid etc. (column 3, lines 3-10). Furthermore, working examples 1-7 in Morris et al. disclose microspheres derived from isooctyl acrylate and acrylic acid (column 10, lines 18-20). For reasons discussed above, the examiner does not consider the non-free radically polymerizable acid component used in the process to prepare microspheres to be part of the microsphere composition.

Art Unit: 1713

The data in Tables 4-7 of the instant invention, alluded to by the Appellants to demonstrate the superior qualities, does not in any way reflect the criticality of the process. Interpretation of data is not straight forward because of the following reasons: Test results in Tables 4, 5 rely on sample #s 1-14 which are formulated in Example 3 and summarized in Tables 1-2 (page 27, specification). It is noted that sample #s 1-9 are formulated using polymeric beads according to example 2.1c (page 26, lines 40-44) and sample #s 10-14 are formulated using polymeric beads as described in examples 2.1a and 2.1b (page 27, lines 20-25). Polymer morphology and monomer compositions of polymeric beads 2.1a, 2.1b and 2.1c are presented in Example 2.1c on page 25. None of the compositions include all the components recited in the instant process of making the microspheres. While samples 2.1a and 2.1c **do not show any non-free radically polymerizable acid component** that is being argued as the critical component in the process and the composition, sample 2.1b includes only an acrylate and a non-free radically polymerizable acid **but no ionic monomer** in the composition. Thus, it is unclear to the examiner as to which of the three microspheres qualify as solid microspheres made by the instantly recited process.

Further confusion arises from samples 13 and 14 shown in Table 2 as they are identified as the invention but comprise hollow microspheres as opposed to solid microspheres. Additionally, the specification on page 31, lines 44-49 discloses that sample #14 with hollow microspheres demonstrates the adhesive of the invention and that it is unclear why sample #13 gave a poor casting appearance. The examiner concludes that based on the test data, both the hollow and solid microspheres demonstrate superior adhesive properties which is also the crux of the Morris et al.'s invention.

Art Unit: 1713

In conclusion, the data in Tables 4-7 is incoherent and does not demonstrate the superior qualities as claimed by the Appellants. While Morris et al. disclose that solid microspheres may be prepared by one-step emulsification process as described in U.S. Pat. No.s 3,620,988; 4,166,152; 4,495,318; 4,598,112; 4,786,696 or 4,645,783 and DE 3,544,882, Appellants have not differentiated the microspheres of the instant invention from the prior art solid microspheres with side-by-side experimentation. Additionally, Appellants' data does not show side-by-side experimentation with and without the use of non-free radically polymerizable acids so as to unequivocally establish the criticality of the process. Thus, it is the examiner's position that the instantly claimed adhesive composition of claims 22 and 24 and article as claimed in claims 27 and 29 are either anticipated by under 35 U.S.C 102 (b), or obvious under 35 U.S.C 103(a) over the prior art of record (MPEP 2113 and 706.03 (e)).



Art Unit: 1713

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Satya B. Sastri

Examiner

Art Unit 1713

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